

GAO

United States General Accounting Office

Report to Congressional Committees

January 2000

# DEFENSE INVENTORY

## Opportunities Exist to Expand the Use of Defense Logistics Agency Best Practices

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## Abbreviations

DLA	Defense Logistics Agency
DOD	Department of Defense

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United States General Accounting Office  
Washington, D.C. 20548

National Security and  
International Affairs Division

B-281461

January 26, 2000

Congressional Committees:

Section 347 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 requires us to evaluate the extent to which the Defense Logistics Agency has implemented best commercial inventory practice initiatives contained in a schedule submitted to Congress on May 19, 1998. The National Defense Authorization Act for Fiscal Year 1998 required that the Agency develop and submit the schedule and that implementation of the initiatives be completed by November 2000. A best commercial inventory practice is defined in the 1998 act as a practice that enables the Agency to reduce inventory levels and holding costs<sup>1</sup> while improving the responsiveness of the supply system to user needs.

Many of the initiatives in the schedule are long-term contracts in which the Agency agrees to purchase items from a vendor for 1 or more years or corporate contracts in which multiple requirements with the same vendor are consolidated under one contract. These initiatives reduce or eliminate processing individual purchase orders and leverage the Agency's buying power to obtain lower prices. Other initiatives use techniques such as prime vendors under which a portion of the inventory management responsibilities are transferred to a single vendor, allowing military customers to order supplies only as they are needed and receive supplies on a timely basis. The schedule also includes electronic commerce initiatives that enable Department of Defense customers to search for and order supplies electronically.

We assessed the extent to which the Agency has implemented best commercial practices included in the schedule. Specifically, we evaluated (1) the Agency's progress in implementing the initiatives and (2) opportunities to build on and expand existing efforts.

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<sup>1</sup> Holding costs include the cost of having funds tied up in inventory, the cost of storing items, material obsolescence cost, and inventory losses.

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## Results in Brief

The Defense Logistics Agency has made significant progress in implementing the initiatives listed in the schedule. Of the 75 initiatives listed in the schedule, 43 are considered by the Agency as completed and 15 have been awarded contracts. Two initiatives were canceled, 1 was incorporated into another initiative, and the remaining 14 were still in the contract negotiation phase or had an otherwise uncertain status. Sales related to these initiatives were estimated to be \$2.2 billion, or about 27 percent of the Agency's projected fiscal year 1999 sales of secondary inventory items,<sup>2</sup> excluding fuels. Of this amount, over \$1.8 billion of sales is associated with four initiatives that relate to medical, pharmaceutical, and food items while almost \$400 million is associated with the remaining implemented initiatives. The most effective initiatives to date have been the medical and food prime vendor initiatives, which have transferred inventory management functions from the Agency to key suppliers. These initiatives enabled the Agency to reduce inventory levels and related costs and improve service to military customers. Initiatives related to hardware and clothing items have had only a limited impact on business operations, but recent initiatives may provide a foundation for future improvements because they also transfer inventory management functions to key suppliers.

The Agency is attempting to build on the success of its implemented initiatives and expand the use of best practices, but significant implementation obstacles must be overcome. Over 90 percent of the Agency's estimated fiscal year 1999 sales of hardware items were not covered by the initiatives in the schedule. To expand the use of best practices, the Agency is developing a strategy that focuses on using commercial distributors to support military customers for hardware items that are used frequently and regularly and creating alternative methods for items that are more unpredictable and difficult to support. In its efforts to adopt best practices, the Agency and the military departments have faced a variety of implementation issues. Many issues are related to concerns over whether the new practices can adequately meet military supply needs and how the new practices will affect employees' jobs. Though these obstacles were overcome in some cases, they are significant because they can slow

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<sup>2</sup> Secondary inventory includes reparable components, subsystems, and assemblies; consumable repair parts; bulk items and material; food; and expendable end items, including clothing and other personal gear.

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or stop implementation efforts or deter the military departments' full participation in the initiatives.

To build on the Agency's progress in implementing the initiatives and encourage participation across the Department of Defense, we are recommending that the Secretary of Defense direct the military departments and the Defense Logistics Agency to develop a Department-wide approach to promote the services' use of the Agency's initiatives and resolve implementation obstacles.

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## Background

The Department of Defense (DOD) operates a worldwide supply system to buy, store, and distribute inventory items. Through this system, DOD manages 4.3 million types of consumable items, of which about 4 million are managed by the Defense Logistics Agency (DLA).<sup>3</sup> About 3.8 million items that DLA manages are considered hardware items such as spare parts, bolts, and fuses, many of which are needed to support weapon systems and equipment, and the remaining items include a combination of medical, pharmaceutical, food, clothing, and fuel items. Traditionally, DLA buys consumable items in large quantities, stores them in distribution depots until they are requested by the military services, and then ships them to a service facility where they are used. Each year, DLA spends billions of dollars to provide these services. According to fiscal year 1998 financial statements, DLA reported that its supply management costs, which include inventory purchases, distribution, and material management, totaled \$12.7 billion, and inventory on hand was \$9.8 billion, including fuels. DLA's customers are primarily the military services.

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<sup>3</sup> Consumable items are discarded after use rather than repaired.

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Since 1990, we have identified DOD inventory management as a high-risk area because levels of inventory were too high and management systems and procedures were ineffective.<sup>4</sup> In addition, our financial statement audits have identified continuing significant problems with the integrity of DOD's inventory data. For example, we reported that inaccurate inventory data resulted from weaknesses in DOD's procedures, which are relied on to maintain visibility over, and conduct physical counts of, on-hand inventories. Until these problems are effectively resolved, DOD's ability to reliably measure and assess performance will continue to be impaired. While DOD has made some improvements, these general conditions still exist, and this area remains on our high-risk list.<sup>5</sup> We have reported that adopting best business practices in inventory management and improving the reliability of financial management information are key steps toward solving these problems.

Congress has taken specific actions to encourage DOD to adopt best commercial practices to improve inventory management. Collectively, the defense authorization acts for fiscal years 1998 and 1999 have required DLA and the services to develop and submit to Congress schedules for implementing best commercial practices. The Department of Defense is working to adopt best practices in its operations. Its performance plan for fiscal year 2000 notes that the inventory supply system is larger than required to support today's smaller force structure and outlined goals to reduce inventory levels through improved business practices and streamline infrastructure.

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## DLA Has Made Progress Adopting Best Practices

DLA has made significant progress in its efforts to adopt commercial best practices for inventory management by implementing the initiatives identified in the schedule provided to Congress. The Agency has implemented or awarded contracts for a majority of the initiatives, and sales related to these initiatives were estimated to be about \$2.2 billion, or 27 percent of DLA's estimated fiscal year 1999 sales of \$8 billion for

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<sup>4</sup> In 1990, we began a special effort to review and report on the federal program areas that we identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement. This effort, which was supported by the Senate Committee on Government Affairs and the House Committee on Government Reform, brought a much-needed focus to problems that were costing the government billions of dollars.

<sup>5</sup> *Major Management Challenges and Program Risks: Department of Defense* (GAO/OCG-99-4, Jan. 1999).

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secondary inventory items, excluding fuels. Though most of DLA's progress implementing best practices relates to medical and food items, it has also taken significant steps to improve the management of clothing and hardware items.

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### DLA Has Made Progress Implementing the Schedule Initiatives

The Agency considers 43 of the 75 initiatives listed in the schedule as completed and has awarded contracts for 15 others. Two other initiatives were canceled, 1 was incorporated into another initiative, and the remaining 14 initiatives were still in the contract negotiation phase or had an otherwise uncertain status.<sup>6</sup> Because the contract negotiation process is unpredictable and contract award dates often shift, we could not determine whether implementation of the remaining 14 initiatives is likely to be completed by November 2000. Appendix I summarizes the status of DLA's initiatives and the amount of sales the initiatives produced in fiscal year 1998 and estimated for fiscal year 1999.

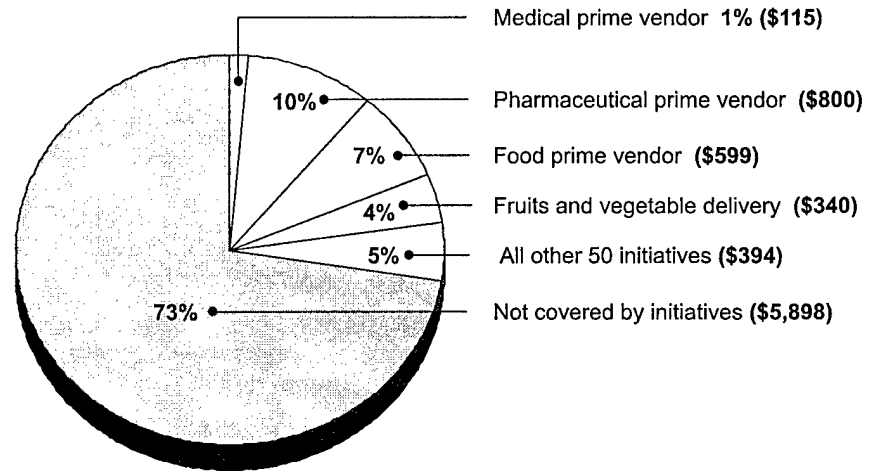
As shown in figure 1, DLA estimated that the implemented initiatives would cover about \$2.2 billion or 27 percent of fiscal year 1999 sales of secondary inventory items, excluding fuels.<sup>7</sup> Of that amount, over \$1.8 billion of sales related to medical, pharmaceutical, and food items that related to 4 initiatives, and the remaining 50 initiatives accounted for nearly \$400 million in sales.

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<sup>6</sup> Initiative status is as of August 1999, which was the most current information available at the time of our review.

<sup>7</sup> We did not collect or analyze data on the fuel initiatives because they covered energy management issues rather than the management of secondary inventory items.



**Figure 1: DLA Sales Covered by Best Practice Initiatives**

Dollars in millions

Note: Estimated fiscal year 1999 sales.

Source: GAO analysis.

The prime vendor initiatives for pharmaceuticals and medical items were implemented by DLA from 1993 through 1996. Under these initiatives, the customer places orders with a prime vendor and most products are delivered within 24 hours after receipt of an order. Therefore, DLA no longer has to purchase, store, and distribute these items. According to DLA, these initiatives have resulted in reductions in the number of items that are stocked in its distribution depots, and wholesale medical inventory reductions were estimated to be \$177 million from fiscal year 1993 through fiscal year 1997. Other savings realized at DOD hospitals include lower stock levels, holding costs, and prices that DOD estimated saved approximately \$167 million in 1995 through 1996. Also, officials from Camp Lejeune, North Carolina, and Lackland Air Force Base, Texas, told us that by now relying on the medical and pharmaceutical prime vendors, they were able to reduce on-hand inventories and warehouse storage space. They also said they were pleased with the variety of the products available and the timely delivery of orders.

DLA has successfully implemented two initiatives for food items. In one initiative, the Agency contracted for prime vendors to distribute food items to troop dining facilities within 48 hours of ordering. According to officials

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at Camp Lejeune and Lackland Air Force Base, this initiative has reduced or eliminated the need for DOD-owned dry and cold storage facilities and associated inventories. Also, according to DLA, this initiative has resulted in about a \$39-million reduction in wholesale inventories for these items from fiscal year 1995 through fiscal year 1997 and an estimated \$78 million savings at customer locations during the same time period. Under an initiative for fruits and vegetables, the vendor provides full service distribution support for an assigned geographic area and produce is usually shipped within 24 hours.

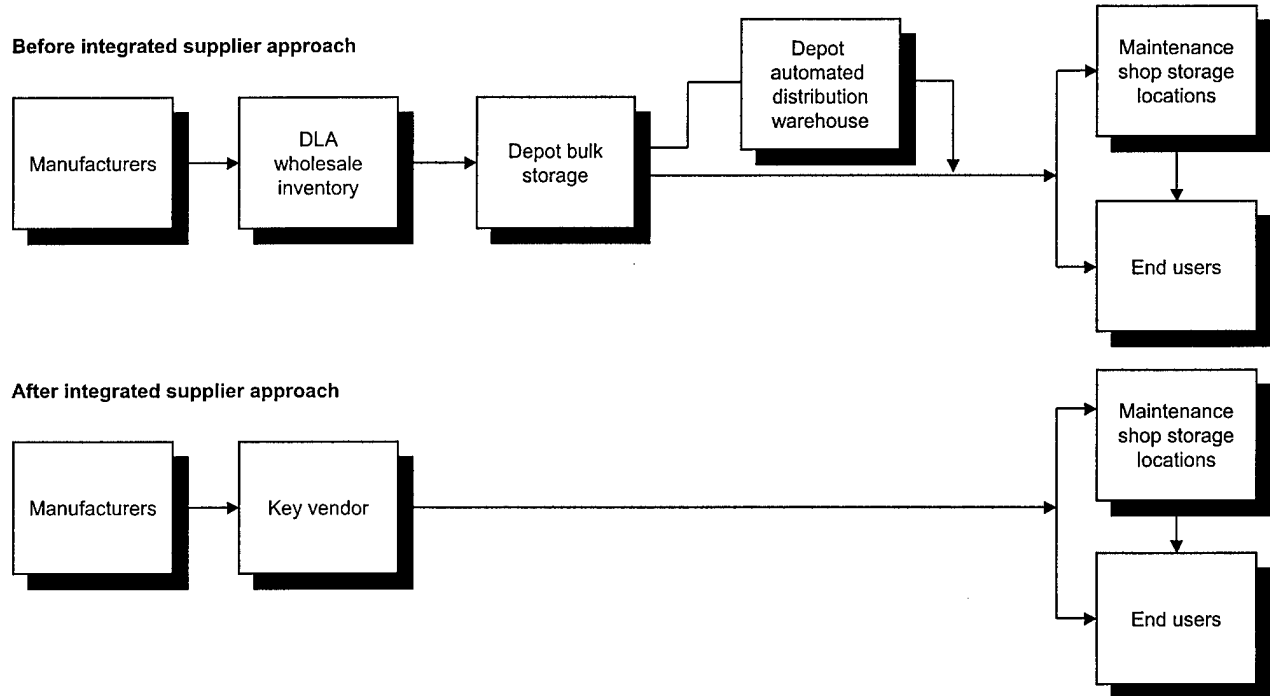
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### New Clothing and Hardware Initiatives Are Significant First Steps

DLA has made less progress implementing best practices for clothing and hardware items, but initiatives begun in 1998 and 1999 provide a good foundation for future improvements. Using the results and lessons learned from an earlier prime vendor initiative for clothing items, DLA awarded a contract in August 1999 for prime vendor support for about 2,500 customers in the southeastern United States. Under this contract, DLA will negotiate with suppliers to purchase uniform items at a discounted price, and the prime vendor will distribute these items to military customers within 1 to 4 days. This approach will transfer all inventory distribution responsibilities from DLA to a prime vendor.

The Industrial Prime Vendor initiative is designed to improve the management of hardware items weapon system maintenance activities use and is being tested at six Navy and Marine Corps locations and at Army, Navy and Air Force locations in Okinawa, Japan. The first contract was awarded for the Naval Aviation Depot North Island, San Diego, California, in 1998. Through this initiative, DLA contracts with a prime vendor to perform inventory management functions, such as ordering items as they are needed and replenishing item bins in the maintenance facility, for selected items that the services need to repair various weapon systems. The vendor places its personnel within the DOD maintenance facility to perform all of the required functions, and it can purchase inventory from a variety of supply sources, including DLA. Transferring inventory management responsibilities to a supplier operating within the customer's facility integrates the supplier into the customer's business operations. The prime vendor approach could eliminate parts of DOD's traditional supply process at a DOD repair facility, as shown in figure 2.

**Figure 2: DOD Supply Functions Eliminated by Using Integrated Suppliers**



Source: GAO analysis of DOD and private sector practices.

Under the Industrial Prime Vendor initiative, the vendor is contractually required to meet 100 percent of customer needs and deliver items within 24 hours of receiving an order to fill an empty bin, which will eliminate back orders for items that have been unavailable—at a reduced total cost to the government. For example, at Camp Lejeune and Camp Pendleton, the prime vendor is expected to increase availability of about 1,500 items from 70 percent to 100 percent of the time and improve the order-ship time from 30 days to 1 day. In addition, DLA estimates that its inventory could be reduced by at least \$98 million after implementing the initiative at the initial test sites.

Also, the prime vendor approach has been well received by the military customers. For example, an official at the Naval Aviation Depot, Cherry Point, North Carolina, said that the industrial prime vendor approach encourages a partnership in which a repair depot works directly with the vendor to ensure that it understands and meets the depot's supply

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requirements. By providing on-site assistance and support, the vendor can react sooner to potential supply problems than the customer can using the traditional process. This official believes that the vendor can help the Cherry Point depot reduce its inventory levels and obtain items currently on back order.

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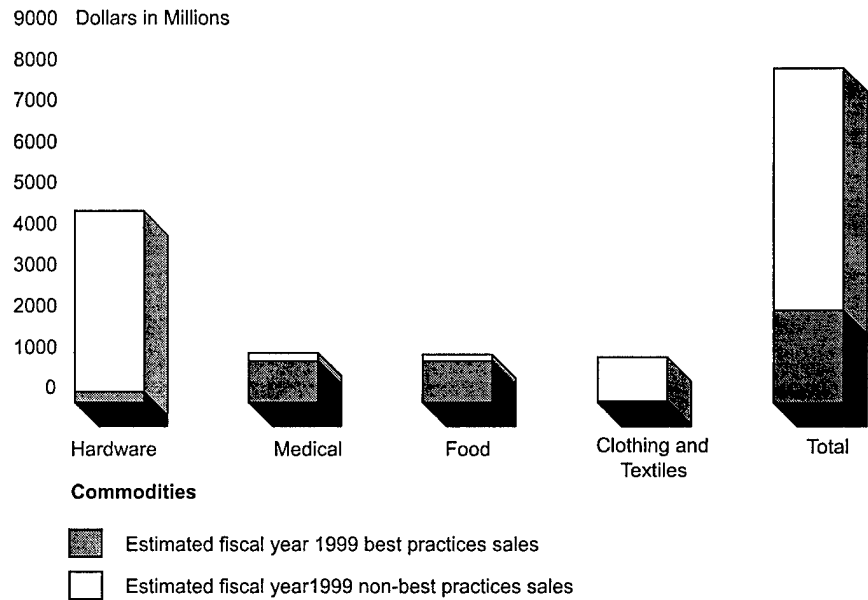
## Opportunities and Obstacles Exist to Expanding Best Practices

DLA has a significant opportunity to build on and expand the success of its implemented initiatives and expand best practices, especially to improve the management of hardware items, but some implementation obstacles must be overcome. Over 90 percent of the sales for hardware and clothing items are not covered by the initiatives in the schedule. To expand the use of best practices, DLA is developing a strategy that focuses on using commercial distributors to support military customers for hardware items that are used frequently and regularly and creating alternative methods for items that are more unpredictable and difficult to support. As it expands best practices, DLA will continue to face obstacles that have limited the services' participation in some initiatives and that require a Department-wide approach to overcome. These obstacles include the customer's lack of confidence in the new practices and the need for various DOD organizations to work together to implement each initiative.

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## Hardware and Clothing Initiatives Cover a Small Portion of Sales

Although hardware items represented 3.8 million of the 4 million items DLA manages and about 57 percent of the Agency's sales, as shown in figure 3, schedule initiatives covered only 8 percent of the estimated \$4.7 billion hardware sales for fiscal year 1999. In addition, clothing initiatives covered only 2 percent (\$22 million) of the estimated \$1.1 billion fiscal year 1999 sales of those items.

**Figure 3: DLA Sales Covered by Best Practice Initiatives by Type of Supply**

Note: Sales data do not include sales through DLA's electronic commerce mall (Emall).

Source: GAO analysis.

## Strategy to Expand Best Practices

DLA is developing a strategy to expand best practices for hardware items that initially focuses on items that are used frequently by military customers. These items are more easily adapted to commercial distribution networks that provide goods and services to private sector companies and represent the majority of DLA's business operations related to hardware items. As shown in table 1, frequently used items represent 7 percent of the hardware items managed, but 73 percent of DLA's annual hardware sales.

Table 1: DLA Hardware Inventory Characteristics

Frequency of item use	Number of inventory items	Percent	Annual sales <sup>b</sup> (thousands)	Percent	Inventory value <sup>c</sup> (billions)
Frequent customer demands	264,000	7	\$3,239,000	73	\$1.6
Infrequent customer demands <sup>a</sup>	3,343,000	87	910,000	21	4.1
Overstocked (no anticipated DLA purchases)	166,000	4	283,000	6	2.1
No anticipated customer demands	68,000	2	0	0	0.2
<b>Total</b>	<b>3,841,000</b>	<b>100</b>	<b>\$4,432,000</b>	<b>100</b>	<b>\$8.0</b>

<sup>a</sup>Nonstocked items are included in the number of inventory items and annual sales for infrequent customer demands.

<sup>b</sup>Sales figures based on fiscal year 1998 data include back ordered items that may not be actually paid for in the same year that they are ordered. Therefore, cited fiscal year 1999 sales data for hardware items in other areas of the report are not comparable to these figures.

<sup>c</sup>Inventory valued at latest acquisition cost as of January 13, 1999.

Source: Defense Logistics Agency.

For hardware items that are infrequently requested, such as aircraft parts not expected to fail through normal usage, DLA faces a more difficult challenge when adopting best practices. In many cases, these items are unique to the military, and commercial distribution networks do not exist to support these military requirements. Therefore, DLA stocks many of these items for an extended period of time because the services have indicated the items are mission-critical and may be needed in the future. Currently, DLA holds inventory valued at \$4.1 billion to meet these requirements.

For these more difficult to manage items, DLA initiated a strategy in fiscal year 1998 that involves working with customers, manufacturers, and distributors to create new supply networks. As a part of this strategy, DLA is grouping items that have common manufacturing characteristics, such as hydraulics and mechanical systems, to streamline the production of these items and attract manufacturers and suppliers that can develop a support system similar to established commercial distribution networks. In other cases, DLA plans to group frequently and infrequently requested items, and contract with a vendor to support both. Some items, however, may not be suitable for commercial support and DLA will continue to buy and store such items to meet military requirements.

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As discussed earlier, DLA is testing a prime vendor initiative for clothing items in the southeastern United States that if successful, may be expanded nationwide. In this regional test, which covers 12 states, DLA has identified about 2,500 customer locations and annual clothing sales of approximately \$160 million. In fiscal year 1999, DLA expected this initiative would cover about \$10 million of these sales. DLA plans to expand this initiative to additional states within 12 months of the initial award. According to DLA officials, when fully implemented, this initiative could cover about \$465 million of DLA's annual sales for clothing items.

As part of its strategy to expand best practices, DLA is also taking actions to more effectively manage initiative implementation. For example, DLA is identifying performance measures the private sector uses that may be applicable to DLA operations. Also, the Agency is defining more specific milestones to complete implementation of the initiatives. DLA did not specify when these measures and milestones would be established.

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### Lessons Learned From Implementing Best Practices

From our discussions with DLA and military officials and our review of documents related to implementing the initiatives, we identified more than 100 citations of obstacles involving various DOD organizations that canceled, delayed, or could have delayed, initiative implementation. From these citations, we identified seven obstacles that repeatedly surfaced and examples of techniques DLA and the services used to overcome them (see table 2).

**Table 2: Implementation Obstacles and Techniques Applied to Overcome Them**

<b>Obstacle</b>	<b>Technique applied</b>
Customers lack confidence in a new process to meet their supply needs.	Assured customers that DLA maintains enough supplies for worldwide support to support the customer's needs if the new process fails.
Customers focus on item price rather than the total cost of the supply system.	Conducted baseline studies of the total cost of delivering inventory under the current system at specific locations and used this to compare to the total cost of the new system.
Employees fear job loss.	Reassigned displaced employees to other parts of the organization.
Changing a DOD business practice requires the participation of different services, DLA and the private sector.	Developed an effective working relationship between each organization.
DOD information systems do not always produce accurate data on item use.	Negotiated with vendors for a phase-in period where accurate usage data can be accumulated.
Commercial distribution networks cannot always support DOD's needs.	Encouraged new alliances between manufacturers and distributors.
Vendors resist accepting new risks.	Negotiated with vendors to share the risks associated with the new business practices.

Though DLA and the services were able to overcome these obstacles in some cases, the obstacles are significant because they can slow or stop DLA's implementation efforts. For example, in 1998, DLA attempted to implement a prime vendor program for avionics equipment that never progressed beyond the contract negotiation phase. According to DLA officials, this initiative failed because the Air Force customer and the potential prime vendor did not agree to the scope of services the vendor would provide. Another prime vendor initiative to support the M9 Armored Combat Earthmover was delayed, and a contract award is uncertain due to concerns raised during contract negotiations over item prices and the scope of the vendor's responsibilities.

According to DLA officials, concerns over item price increases are major obstacles when best practices are first introduced to potential military customers. In some cases, using a best practice may increase the unit price of an item, but this increase can be offset by a larger, but less visible, reduction in total DOD costs, better product quality, and improved customer service such as a greater availability of parts and faster delivery.



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This shift from a unit price to a "best value" focus is difficult to accomplish. One DLA approach has been to conduct baseline cost comparisons at specific implementation sites to demonstrate to the customer how the cost under the new process is lower than the total cost under the traditional supply system. However, it may be difficult, if not impossible, to develop similar baseline cost comparisons on a broader scale because of significant weaknesses in the reliability of reported DOD inventory data and cost information.<sup>8</sup>

Another obstacle is the need for various DOD organizations to work together to implement each initiative. Once DLA awards a contract for an initiative, the services decide the extent to which each installation will use the initiative in its operations. For example, DLA has awarded contracts nationwide for prime vendors to provide military customers and other organizations with items to support facilities maintenance. As of October 1999, however, only 110 of 278 potential customers identified by DLA were actually using the prime vendor. DLA officials stated that using outcome measures illustrating Department-wide benefits of best practices is a technique that may encourage the services to more actively participate in this and other initiatives.

DLA's efforts to implement the Industrial Prime Vendor initiative provide an example of how these obstacles arose and the techniques DLA used to overcome them. DLA and service officials emphasized that the basic foundation to their success was developing an effective working relationship among the vendor, military customers, and DLA. Achieving this success was difficult, requiring detailed negotiations with the customers, vendors, and suppliers. The obstacles encountered and techniques applied to overcome them included:

- Employees at maintenance facilities believed the initiative would replace their jobs but instead employees affected by the initiative were reassigned to work in other locations or hired by the prime vendor.
- Some military service officials were concerned that if the prime vendor could not provide support and DLA would no longer supply the items then they would be worse off. DLA assured its customers that the stock it maintains for worldwide support would be sufficient to satisfy

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<sup>8</sup>*DOD Financial Management: More Reliable Information Key to Assuring Accountability and Managing Defense Operations More Efficiently* (GAO/T-AIMD/NSIAD-99-145, Apr. 14, 1999).

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customer demands if the prime vendor contracts failed or were terminated.

- According to officials representing the prime vendor, one of the biggest obstacles was getting the numerous suppliers of the wide range of items covered by the contract to work with an integrated supplier. Some suppliers were concerned about providing pricing data and other information to another supplier who could be a competitor. In this case, the prime vendor had to develop partnership relationships with multiple suppliers. Other prime vendor concerns were about meeting tough military requirements and having to hold inventory to make sure the parts were available. Instead of just passing on inventory risk to the supplier, DLA developed a shared risk approach in which it would buy back a portion of the investment in inventory if the prime vendor contract was canceled by the government.
- To address customer concerns over potential increased prices or costs, DLA conducted baseline studies at each implementation site to demonstrate to the customer how total costs would be lowered using the prime vendor approach.
- To ensure that the prime vendor has accurate data to support the customer's requirements, the contract allows for a 2-year base period that will provide sufficient time for the contractor to collect and validate item usage data.

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## Conclusions

The Defense Logistics Agency has made significant progress implementing the best practice initiatives contained in the schedule, but opportunities exist to expand these efforts. Recognizing this opportunity, the Agency is taking steps to develop a strategy to expand the use of best practices for hardware items, which, if successful, could lead to further supply system improvements and cost reductions. Department-wide obstacles that can prevent and have prevented full implementation of the initiatives include a lack of confidence in the new practices and a focus on item price instead of the total cost of operations. Until these obstacles are resolved and the services maximize their participation in each of the initiatives, supply system improvements and cost reduction opportunities will be lost.

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## Recommendations

To build on and expand the Agency's efforts to adopt best practices, we recommend that the Secretary of Defense direct the Director, Defense Logistics Agency, and the secretary of each military department to develop a Department-wide approach to address implementation obstacles and

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promote the active support and participation by each service in the Agency's initiatives. This approach should include providing a forum for (1) highlighting the benefits of participating in the initiatives, (2) determining appropriate outcome measures for assessing DOD-wide progress and results, and (3) resolving obstacles and sharing lessons learned from implementing best practices.

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## Agency Comments and Our Evaluation

In commenting on a draft of this report, DOD concurred with our recommendation and stated it will utilize the Logistics Reform Senior Steering Group as the forum to address obstacles to implementing DLA best practice initiatives. According to DOD, this group will promote participation by DOD activities in those initiatives to the extent they provide the combination of quality, timeliness, and cost that best meet DOD's requirements. The group will also highlight the benefits of participating in the initiatives, consider appropriate outcome measures, and share lessons learned. DOD further stated that DLA will take the lead in presenting these issues to the group and that completion is expected by September 2000. DOD's comments are included in their entirety as appendix II.

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## Scope and Methodology

To assess DLA's progress in implementing best practices and to obtain detailed information about initiatives listed in the schedule submitted to Congress in 1998, we met with DLA officials from the Defense Supply Center, Columbus, Ohio; Defense Supply Center, Richmond, Virginia; and Defense Industrial Supply Center and Defense Supply Center, Philadelphia, Pennsylvania. Specifically, we obtained and analyzed information from these organizations on (1) the status of implementation, (2) the number of items and level of sales covered by the initiatives to assess the extent to which the initiatives cover DLA's business operations, and (3) the effects the initiatives had on DOD's supply system if data was available. We did not verify the accuracy of the inventory and sales data provided by DLA officials.

To determine the status of the initiatives under the fuel supply category, we talked with an official from the Defense Energy Support Center, Fort Belvoir, Virginia. We did not collect or analyze data on the fuel initiatives because they covered energy management issues rather than the management of secondary inventory items.

To assess DLA's progress in implementing the initiatives and their effects on supply operations at military installations, we asked DLA officials to identify locations where initiatives were being implemented and then selected locations where the initiatives were more likely to change the customers' operations. We also chose sites that had experience with more mature initiatives, such as the medical prime vendor. As a result of these criteria, we examined installations under the Navy and the Marine Corps because they were the first implementation sites for the Industrial Prime Vendor initiative, a key initiative for hardware items and were also locations for mature initiatives, including medical and food prime vendors. We met with logistics personnel and end users involved with the initiatives at their installation. When possible, we also met with vendor representatives of these initiatives. We met with officials at Naval Aviation Depot North Island, San Diego, California; Explosive Ordnance Disposal Unit One, San Diego, California; Camp Lejeune Marine Corps Base, Jacksonville, North Carolina; and Naval Aviation Depot, Cherry Point, North Carolina. For additional information on the implementation progress of DLA's initiatives, we relied on information collected in May 1998 at Lackland Air Force Base, Texas. Collected information discussed the supply operations, customer satisfaction, the techniques used for implementing best practices at their facilities, and lessons learned from their experiences with DLA's best practices. We did not verify the accuracy of logistics costs and performance data provided by installation officials.

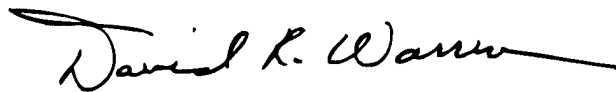
To obtain information on opportunities to expand best practices, we interviewed officials at DLA Headquarters, Fort Belvoir, Virginia, on DLA's strategy for implementing best practices and any other efforts DLA officials had taken to increase and improve the implementation of best practices. Specifically, we collected information on how DLA selected candidate items for future best practice efforts and assessed the appropriateness and implications of that approach. We also obtained information on implementation experiences and lessons learned from implementing best practices from each of the supply centers and military installations cited above. From interviews and documents, we identified common implementation obstacles and examples of how those obstacles were overcome by DLA and the services.

We conducted our review from November 1998 through August 1999 in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the appropriate congressional committees; the Honorable William Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; the Honorable F. Whitten Peters, Secretary of the Air Force; Lieutenant General Henry T. Glisson, Director, Defense Logistics Agency; and the Honorable Jacob Lew, Director, Office of Management and Budget. We will also make copies available to others upon request.

Please contact me on (202) 512-8412 if you or your staff have any questions concerning this report. Key contributors are listed in appendix III.

A handwritten signature in black ink, reading "David R. Warren". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David R. Warren, Director  
Defense Management Issues

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List of Congressional Committees

The Honorable John Warner  
Chairman  
The Honorable Carl Levin  
Ranking Minority Member  
Committee on Armed Services  
United States Senate

The Honorable Ted Stevens  
Chairman  
The Honorable Daniel K. Inouye  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
United States Senate

The Honorable Floyd Spence  
Chairman  
The Honorable Ike Skelton  
Ranking Minority Member  
Committee on Armed Services  
House of Representatives

The Honorable Jerry Lewis  
Chairman  
The Honorable John P. Murtha  
Ranking Minority Member  
Subcommittee on Defense  
Committee on Appropriations  
House of Representatives

# Status and Sales Data for Defense Logistics Agency's Best Practice Initiatives (as of August 1999)

Dollars in thousands

Type of supply	Initiative	Type of initiative	Status	Fiscal year 1998 sales	Estimated fiscal year 1999 sales
Medical and pharmaceutical	Pharmaceutical prime vendor	PV	Contract awarded - complete	\$773,700	\$800,000
	Medical/surgical prime vendor	PV	Contract awarded - complete	96,100	115,000
	National mail order pharmacy	C	Contract awarded - complete	28,400	70,000
	National pharmaceutical wholesaler (contractor supporting National mail order pharmacy) <sup>a</sup>	C	Contract awarded - complete		
	National retail pharmacy network	C	Uncertain	<sup>b</sup>	<sup>b</sup>
	Dental electronic catalog	EC	Contract awarded - in process	<sup>b</sup>	2,500
	Optical electronic catalog	EC	Contract awarded - in process	<sup>b</sup>	500
	Laboratory integrated delivery system	EC	Contract awarded - in process	<sup>b</sup>	1,000
	<b>Subtotal</b>			<b>\$898,200</b>	<b>\$989,000</b>
Subsistence (food)	Subsistence prime vendor	PV	Contract awarded - complete	410,000	599,000
	Ultrahigh temperature milk long term contract	C	Contract awarded - complete	<sup>b</sup>	3,800
	Unitized group rations - A	C	Contract awarded - complete	4,900	15,400
	Direct market logistics	BPA	Contract awarded - complete	340,000	340,000
	Controlled atmosphere refrigerated transport	BPA	Contract awarded - complete	40,000	40,000
	Food service equipment prime vendor	PV	Contract awarded - complete	<sup>b</sup>	2,000
	<b>Subtotal</b>			<b>\$794,900</b>	<b>\$1,000,200</b>
Clothing and textiles	Clothing and textiles prime vendor	PV	Contract awarded - complete	16,600	12,000
	Virtual prime vendor - uniforms	VPV	Contract awarded - in process	<sup>b</sup>	10,000
	<b>Subtotal</b>			<b>\$16,600</b>	<b>\$22,000</b>
Commercially available electronics	Support method for avionics/electronics	VPV	Canceled	<sup>b</sup>	<sup>b</sup>
	<b>Subtotal</b>			<sup>b</sup>	<sup>b</sup>

Continued

Appendix I  
Status and Sales Data for Defense Logistics  
Agency's Best Practice Initiatives (as of  
August 1999)

Dollars in thousands

Type of supply	Initiative	Type of initiative	Status	Fiscal year 1998 sales	Estimated fiscal year 1999 sales
Construction	Wood products prime vendor	PV	Contract awarded - in process	1,080	9,500
	<b>Subtotal</b>			<b>\$1,080</b>	<b>\$9,500</b>
Industrial	C-130 virtual prime vendor	VPV	Contract awarded - complete	20,500	22,000
	Industrial prime vendor	PV	Contract awarded - in process	1,500	28,500
	<b>Subtotal</b>			<b>\$22,000</b>	<b>\$50,500</b>
Automotive	Automotive corporate contracts	C	Contract awarded - complete	17,809	17,809
	Meritor heavy vehicle systems corporate contract	C	Contract awarded - complete	1,412	1,604
	Circle seal corporate contract	C	Precontract award	<sup>b</sup>	<sup>b</sup>
	Automotive prime vendor overseas	PV	Contract awarded - complete	<sup>b</sup>	2,800
	Fleet automotive support initiative	VPV	Precontract award	<sup>b</sup>	<sup>b</sup>
	<b>Subtotal</b>			<b>\$19,221</b>	<b>\$22,213</b>
Fuels <sup>c</sup>	Regional demonstration of total energy management	D	Demonstration complete	<sup>c</sup>	<sup>c</sup>
	Energy savings performance contracting demonstration	D	Demonstration complete	<sup>c</sup>	<sup>c</sup>
	California centralized electricity procurement demonstration	D	Demonstration complete	<sup>c</sup>	<sup>c</sup>
	Privatization of utility infrastructure demonstration	D	Demonstration ongoing	<sup>c</sup>	<sup>c</sup>
	<b>Subtotal</b>			<sup>c</sup>	<sup>c</sup>
Facilities maintenance	Maintenance repair operations prime vendor	PV	Contract awarded - in process	7,492	42,670
	<b>Subtotal</b>			<b>\$7,492</b>	<b>\$42,670</b>
Aviation	Grimes Aerospace corporate contract	C	Contract awarded - complete	60,800	4,700
	Bell Helicopter Textron corporate contract	C	Contract awarded - complete	10,207	17,955
	Boeing Helicopter corporate contract	C	Contract awarded - complete	2,432	4,373
	Boeing Seattle corporate contract	C	Contract awarded - complete	158	325
	McDonnell Douglas Aircraft corporate contract	C	Contract awarded - complete	1,819	2,600
	C-5 logistics support	VPV	Precontract award	<sup>b</sup>	<sup>b</sup>

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Appendix I  
Status and Sales Data for Defense Logistics  
Agency's Best Practice Initiatives (as of  
August 1999)

Dollars in thousands

Type of supply	Initiative	Type of initiative	Status	Fiscal year 1998 sales	Estimated fiscal year 1999 sales
	C-141 spoiler contract	C	Contract awarded - complete	<sup>b</sup>	1,614
	F-15 fuel tank long-term contract	C	Incorporated into McDonnell Douglas corporate contract		
	Aircraft surface cleaning compound long-term contract	C	Contract awarded - complete	37	88
	Virtual prime vendor for program depot maintenance	VPV	Precontract award	<sup>b</sup>	<sup>b</sup>
	KC135 service life extension program	C	Contract awarded - complete	228	1,707
	F/A18 top degrader long-term contract	C	Contract awarded - complete	889	613
	Aerospace applications corporate contracts	C	Contract awarded - in process	<sup>b</sup>	1,902
	Western Design Howden corporate contract	C	Contract awarded - complete	<sup>b</sup>	3,710
	GE F110 engine parts corporate contract	C	Contract awarded - in process	<sup>b</sup>	321
	<b>Subtotal</b>			<b>\$76,570</b>	<b>\$39,908</b>
Batteries	Battery long-term contracts	C	Contract awarded - complete	8,756	7,827
	Eastern Carolina Vocational Center	C	Contract awarded - complete	187	173
	Vehicular battery consignment program	C	Contract awarded - complete	9,700	10,000
	<b>Subtotal</b>			<b>\$18,643</b>	<b>\$18,000</b>
Electronic commerce	DLA electronic commerce mall (Email)	EC	Contract awarded - in process	335	747
	Electronic catalog contracts	EC	Contract awarded - in process	263	Unable to forecast
	<b>Subtotal</b>			<b>\$598</b>	<b>\$747</b>
Material handling equipment	Material handling equipment initiative	PV	Precontract award	<sup>b</sup>	<sup>b</sup>
	Global mobility material handling equipment	PV	Precontract award	<sup>b</sup>	50
	<b>Subtotal</b>			<sup>b</sup>	<b>\$50</b>
Land-based systems	M9 armored combat earthmover virtual prime vendor	VPV	Award uncertain	<sup>b</sup>	<sup>b</sup>
	M939 five-ton truck virtual prime vendor	VPV	Canceled	<sup>b</sup>	<sup>b</sup>

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**Appendix I  
Status and Sales Data for Defense Logistics  
Agency's Best Practice Initiatives (as of  
August 1999)**

Dollars in thousands

Type of supply	Initiative	Type of initiative	Status	Fiscal year 1998 sales	Estimated fiscal year 1999 sales
	Grove North America corporate contract	C	Contract awarded - complete	b	913
	<b>Subtotal</b>			<b>b</b>	<b>\$913</b>
Maritime systems	Warren Pump corporate contract (composite material pumps)	C	Precontract award	b	b
	Warren Pump corporate contract (metallic pumps)	C	Precontract award	b	b
	J.A. Moody corporate contract	C	Contract awarded - complete	1,221	1,221
	Milwaukee Valve corporate contract	C	Contract awarded - complete	b	1,798
	Air Dry Corporation of America	C	Precontract award	b	90
	Dante Valve Company	C	Contract awarded - complete	b	125
	<b>Subtotal</b>			<b>\$1,221</b>	<b>\$3,234</b>
Other initiatives	Closed loop re-refined oil program	C	Contract awarded - complete	30	588
	Industrial gases	PV	Contract awarded - complete	396	350
	Lubricating oils long-term contracts	C	Contract awarded - complete	5,545	8,481
	Fire-fighting equipment logistics support	PV	Contract awarded - in process	b	1,400
	Marine lifesaving and diving equipment logistics support	PV	Contract awarded - in process	b	1,013
	Photographic industry contracts	C	Contract awarded - complete	10,000	8,040
	Modern burner unit	C	Contract awarded - complete	b	12,100
	Rekeyable lock project	C	Contract awarded - complete	b	6
	Regional integrated suppliers for metals, metal products, and services	PV	Contract awarded - complete	1,200	5,700
	Aqua Chem corporate contract	C	Contract awarded - complete	b	2,340
	Filter elements corporate contracts	C	Contract awarded - in process	b	8,730
	Blackmer Pump corporate contract	C	Precontract award	b	b
	Components for diesel engines corporate contract	C	Precontract award	b	b

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Appendix I  
Status and Sales Data for Defense Logistics  
Agency's Best Practice Initiatives (as of  
August 1999)

Dollars in thousands

Type of supply	Initiative	Type of initiative	Status	Fiscal year 1998 sales	Estimated fiscal year 1999 sales
	Gears, gear boxes, and repair kits corporate contracts	C	Precontract award	<sup>b</sup>	<sup>b</sup>
	<b>Subtotal</b>			<b>\$17,171</b>	<b>\$48,748</b>
<b>All supply types</b>	<b>Total</b>			<b>\$1,873,696</b>	<b>\$2,247,683</b>

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Legend

PV = Prime vendor  
C = Contract  
EC = Electronic commerce  
BPA = Blanket purchase agreement  
VPV = Virtual prime vendor  
D = Demonstration

<sup>a</sup>Sales data for the national pharmaceutical wholesaler are included in the sales data for the national mail order pharmacy.

<sup>b</sup>Not applicable, either because there is no contract in place or the contract was awarded too recently for it to have generated any sales in fiscal year 1998.

<sup>c</sup>While the original schedule listed four energy demonstrations, studying them was not within our scope of the review.

# Comments From the Department of Defense



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000

December 20, 1999

Mr. David R. Warren  
Director, Defense Management Issues  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Warren:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE INVENTORY: Opportunities Exist to Expand the Use of Defense Logistics Agency Best Practices," dated November 18, 1999 (GAO Code 709384/OSD Case 1920). The DoD generally concurs with the draft report. We will utilize the Logistics Reform Senior Steering Group as the forum to address obstacles to the implementation of Defense Logistics Agency best practice initiatives.

Detailed comments on the recommendation are included in the attachment. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,

Roger W. Kallock  
Deputy Under Secretary  
of Defense (Logistics)

Attachment



GAO DRAFT REPORT - DATED NOVEMBER 18, 1999  
GAO CODE 7093843/OSD CASE 1920

"DEFENSE INVENTORY: OPPORTUNITIES EXIST TO EXPAND THE USE OF  
DEFENSE LOGISTICS AGENCY BEST PRACTICES"

DEPARTMENT OF DEFENSE COMMENTS

**RECOMMENDATION:** The GAO recommended that the Secretary of Defense direct the Director, Defense Logistics Agency and the Secretaries of each Military Department to develop a Department-wide approach to address implementation obstacles and promote the active support and participation by each service in the agency's initiatives. This approach should include providing a forum for (1) highlighting the benefits of participating in the initiatives, (2) determining appropriate outcome measures for assessing DoD-wide progress and results, and (3) resolving obstacles and sharing lessons learned from implementing best practices.

**DOD RESPONSE:** Concur. The Logistics Reform Senior Steering Group (LRSSG) will serve as the forum to address obstacles to implementation of Defense Logistics Agency best practice initiatives. The LRSSG will promote participation by DoD activities in those initiatives to the extent consistent with obtaining the combination of quality, timeliness, and cost that best meets the requirement. The LRSSG will highlight the benefits of participating in the initiatives, consider what outcome measures may be appropriate, and share lessons learned. The Defense Logistics Agency will take the lead in presenting these issues to the LRSSG. Completion is estimated by September 2000.

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# GAO Contacts and Staff Acknowledgments

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## GAO Contacts

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## Acknowledgments

In addition to those named above, Kay Kuhlman, Nancy Lively, Tracy Whitaker, Lindsay Musser, and Bill Woods made key contributions to this report.

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# Related GAO Products

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*Inventory Management: More Information Needed to Assess DLA's Best Practice Initiatives* ([GAO/NSIAD-98-218](#), Sept. 2, 1998).

*Inventory Management: DOD Can Build on Progress by Using Best Practices for Repairable Parts* ([GAO/NSIAD-98-97](#), Feb. 27, 1998).

*Defense Inventory Management: Expanding Use of Best Practices for Hardware Items Can Reduce Logistics Costs* ([GAO/NSIAD-98-47](#), Jan. 20, 1998).

*Inventory Management: Greater Use of Best Practices Could Reduce DOD's Logistics Costs* ([GAO/T-NSIAD-97-214](#), July 24, 1997).

*Inventory Management: The Army Could Reduce Logistics Costs for Aviation Parts by Adopting Best Practices* ([GAO/NSIAD-97-82](#), Apr. 15, 1997).

*Inventory Management: Adopting Best Practices Could Enhance Navy Efforts to Achieve Efficiencies and Savings* ([GAO/NSIAD-96-156](#), July 12, 1996).

*Best Management Practices: Reengineering the Air Force's Logistics System Can Yield Substantial Savings* ([GAO/NSIAD-96-5](#), Feb. 21, 1996).

*Inventory Management: DOD Can Build on Progress in Using Best Practices to Achieve Substantial Savings* ([GAO/NSIAD-95-142](#), Aug. 4, 1995).

*Commercial Practices: DOD Could Reduce Electronics Inventories by Using Private Sector Techniques* ([GAO/NSIAD-94-110](#), June 29, 1994).

*Commercial Practices: Leading-Edge Practices Can Help DOD Better Manage Clothing and Textile Stocks* ([GAO/NSIAD-94-64](#), Apr. 13, 1994).

*Commercial Practices: DOD Could Save Millions by Reducing Maintenance and Repair Inventories* ([GAO/NSIAD-93-155](#), June 7, 1993).

*DOD Food Inventory: Using Private Sector Practices Can Reduce Costs and Eliminate Problems* ([GAO/NSIAD-93-110](#), June 4, 1993).

*DOD Medical Inventory: Reductions Can Be Made Through the Use of Commercial Practices* ([GAO/NSIAD-92-58](#), Dec. 5, 1991).